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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,203	11/21/2003	David Monroe Bell	GCSD-1461 (51330)	1976
27975	7590	01/28/2005	EXAMINER	
ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A. 1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE P.O. BOX 3791 ORLANDO, FL 32802-3791			HERNANDEZ, OLGA	
			ART UNIT	PAPER NUMBER
			2144	

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,203

Applicant(s)

BELL ET AL.

Examiner

Olga Hernandez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

Applicant's arguments filed 11/19/04 have been fully considered but they are not persuasive. The applicant argues that the Kimura does not teach the line scan camera the association of line scan images with the corresponding position and time data. Kimura discloses a CCD camera, similar to the CCD element in applicant's camera, and a lane marker detector 14. These two elements function together to provide the same output as applicant's line scan camera (para. 0201-0205). This output is then fed into the road determining section 93. In this section the line scan images are associated with the corresponding position and time from the GPS position detector. Therefore, the rejection is repeated and made final.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 9-14, 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Kimura (2001/0056326).

As per claims 1, 11 and 19, Kimura discloses a vehicle for traveling along a road (abstract); a positioning system to generate position and time data (abstract); camera for mounting on a vehicle to obtain a series of images (abstract); and a data collection controller connected to the positioning system and the camera to associate images with

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corresponding position and time data (abstract). Kimura is using real time data at the time of determining the location of the vehicle. Kimura uses current position, which is the position and time data disclosed by the applicant.

As per claims 2, 12 and 21, Kimura discloses the use of a database to store image and position information (figure 2).

As per claims 3 and 13, Kimura discloses the use of a GPS receiver (paragraph 79).

As per claims 9, 10 and 20, Kimura discloses how to identify lane marker on the road (abstract).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-8, 14-18, 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura (2001/0056326).

As per claims 4 and 14, Kimura teaches a navigation system (abstract). Kimura does not teach the use of an inertial navigation system. However, it would have been obvious to one skill in the art to substitute the inertial navigation system (used to detect a position) for Kimura's navigation system, which is functional equivalent in order to

have better accurate information based on applicant determining the vehicle's position.

See *In re Brown*, 459 F. 2d 531, 535, 173 USPQ 685, 688 (CCPA 1972).

As per claims 5, 6, 15, 16, 22 and 23, Kimura discloses the use of a camera using unspecified lenses (abstract). Therefore, it would have been obvious to one skill in the art to substitute a lens for another lens that perform the same function and are functional equivalent in order to enhance the quality image. See *In re Brown*, 459 F. 2d 531, 535, 173 USPQ 685, 688 (CCPA 1972).

As per claims 7, 17 and 24, Kimura teaches the central processing unit to work with the images (figure 2). Kimura does not teach the frame grabber. However, the use of two or more controllers (including the frame grabber-being a controller) instead of one, where one controller would be enough to work with the images involves only routine skill in the art. *In re Nrewin v. Erlichman*, 168 USPQ 177, 179.

Claims 8, 18 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura (2001/0056326) in view of Satoh et al (6,473,678).

Kimura teaches lane marker detector and road determining section (figure 1). Kimura does not teach displaying the line images. However, Satoh teaches displaying line images of the lane marker in column 4, lines 3-11. Therefore, it would have been obvious to one skill in the art to combine the aforementioned inventions in order to facilitate steering of a vehicle by tracking a lane of a roadway and maintaining the vehicle at a target line using a steering bias.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Hernandez whose telephone number is 571-272-7144. The examiner can normally be reached on Mon-Thu 7:30am-6:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 571-272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Olga Hernandez
Examiner
Art Unit 2144



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